

a.	Convert 200. cal to joules
b.	Convert 587 kJ to calories

Which substance in table 1 requires the most energy to heat? How do you know?

Calculate the energy lost by the metal object for each trial.

A 22.0 g piece of metal was heated to 100°C in a beaker of boiling water. The hot piece of metal was placed in 100 g of water at 25°C. The metal and the water reached thermal equilibrium at 28°C. What is the specific heat of the metal?

Name \_\_\_\_\_ Period \_\_\_\_\_

### Skill 38.04 Problem 2

- Calculate the specific heat of the metal for both trials.
- Average the specific heats for the two trials.
- Report this value to your instructor.